Qty:

10 Um:

Each

: PLATE

: D33031

: N/A

: B

. D3303 REV. B

: 10/05/2008

User: **Estimate Number** This Issue First Issue **Previous Run** Comment

Thursday, 01/05/2008 4:16:41 PM

Julie Lecocq

**Process Sheet** 

**Drawing Name** 

**Part Number** 

**Material** 

**Due Date** 

**Drawing Number** 

**Project Number** 

**Drawing Revision** 

Customer

: CU-DAR001 Dart Helicopters Services

Type

S.O. No. :

**Job Number** : 38971 : 10424

P.O. Number

: 01/05/2008

: NC Prsht Rev.

: //

: 29951

Written By

Checked & Approved By

: Est:A 04.09.07 New issue KJ/JLM

06-06-28 Now On Waterjet JLM Est Rev:B

: SMALL /MED FAB

**Additional Product** 

Job Number:



Seq. #:

**Machine Or Operation:** 

**Description:** 2024-T3 .032 sheet

1.0

M2024T3S032



3.7191 sf(s) 0.3719 sf(s)/Unit Total:

Material: 2024-T3 (QQ-A-250/4) 0.032" thick

(M2024T3S.032)

Batch: 105555

1B8-5-7

2.0

WATER JET

Comment: Qty.:

FLOW WATER JET



Comment: FLOW WATER JET 1-Cut as per Dwg D3303

Dwg Rev:\_

Prog Rev:\_



2-Deburr if necessary

INSPECT PARTS AS THEY COME OFF MACHINE

PT0

3.0

QC2

0

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0

QC8

SECOND CHECK

Comment: SECOND CHECK

5.0 HAND FINISHING HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per Q\$\vec{\$\vec{1}}\$ 005 4.1



# **Dart Aerospace Ltd**

	WORK ORDER CHANGES							
STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
				:				
	`.							
	STEP	STEP PROCEDURE CHANGE	STEP PROCEDURE CHANGE By	STEP PROCEDURE CHANGE By Date	STEP PROCEDURE CHANGE By Date Qty	STEP PROCEDURE CHANGE  By Date Qty Chief Eng / Prod Mgr		

Part No: D3303-1 PAR #: NA Fault Category: Prod Pas Ass, Med & SNAL DQA: D Date: 08/05/12

OQA: N/C Closed: D Date: 08/05/12

NCR: 考	8971	W	ORK OR	DER NON-CONFORMANO	CE (NCR)			
		Description of NC		Corrective Action Section B		Verification	Annroval	Ammroyal
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector
08.05.03	2	QTY(3) have enlarged holes upto operated of 0.140. Consecutive holes in row. Root Cause: Wateriset machine requires maintance	Q55 042 08.05.07		\$53	००१०५१०८	04.05.07	08/05/0
	·			0				
		•						

NOTE: Date & initial all entries

Thursday, 01/05/2008 4:16:41 PM Date: 'User: 1 Julie Lecocq **Process Sheet** Customer: CU-DAR001 Dart Helicopters Services Drawing Name: PLATE Job Number: 38971 Part Number: D33031 Job Number: Seq. #: **Machine Or Operation:** Description: INSPECT POWDER COAT/CHEMICAL CONVERSION Comment: INSPECT CHEMICAL CONVERSION COAT 7.0 PACKAGING 1 PACKAGING RESOURCE# Comment: PACKAGING RESOURCE #1 Identify and Stock Location:\_ FINAL INSPECTION/W/O RELEASE QC21 8.0 Comment: FINAL INSPECTION/W/O RELEASE Job Completion

# **Dart Aerospace Ltd**

Dail Ae	ospace	; Llu								
W/O:			W	ORK ORDER CHA	NGES					
DATE STEP		PROCEDURE CHANGE			_   1	Зу	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Part No	:	PAR #:	Fault Cat	egory:	NCR:	Yes N	o <b>DQ</b>	<b>\</b> :	Date:	
					(	QA: N/C	Close	d:	_ Date: _	<u>.</u>
NCR:			WORK ORE	DER NON-CONFOR	RMANCE (	NCR)				
		Description of NC		Corrective Action	Section B		Verific	ation	Approval	Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Date	Secti		Chief Eng	QC Inspector
								ŧ		
						,		•		

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	38971
Description: Plate	Part Number:	D3303-1
Inspection Dwg: D3303 Rev: B		Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

X	First Article		Prototype
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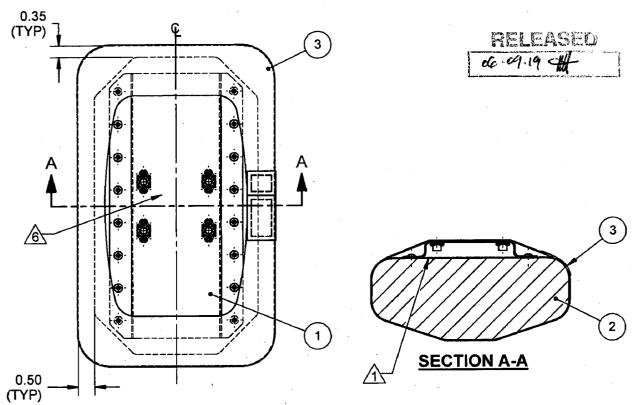
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
5.00	+/-0.030	5.000	*			
3.550	+/-0.005	3,550	*			
1.22 x 45°	+/-0.030	1.33	×			
R0.25	+/-0.030	25,	×			
9.10`	+/-0.030	9,10	*			
7.000	+/-0.005	7.000	يز			
1.000	+/-0.005	1.000	26			
1.050	+/-0.010	1.050	پخ			·
0.725	+/-0.010	197	×			
0.032	+/-0.010	<i>E</i> \$6,	*			
Ø0.129	+0.004/-0.001	130	L			
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		···.		-		
					,	
<u>-</u>						

Measured by: R	Audited by:	4	Prototype Approval:	N/A
Date: 8-5-7	Date:	09 05 08	Date:	N/A

Rev	Date	Change	Revised by	Approved
Α	04.09.08	New Issue	KJ/JLM	
В	07.01.16	5.00 was 5.000; Ø0.129 added	KJ/JLM	



DESIG	IGN DRAWN BY		DART AEROSPAC HAWKESBURY, ONTARIO,	
CHECK		APPROVED	DRAWING NO.	REV. B
(	PH	#	D3303	SHEET 1 OF 4
DATE			TITLE	SCALE
	06.0	08.17	HEAD REST	1:3
 REV DATE		DATE	DESCRIPTION	
Α	(	04.08.18	NEW ISSUE	
В	(	06.08.17	UPDATED FLAT PATTERN TO F ONE OPERATION USING OFFSE	ORM PART IN ET DIE



# **D3303-041 HEAD REST**

ITEM	QTY -041	P/N	DESCRIPTION
	X	D3303-041	HEAD REST
1	1	D3303-043	BRACKET ASSEMBLY
2	2 1 D3305-1 F		FOAM
3	1	D3306-041	COVER ASSEMBLY

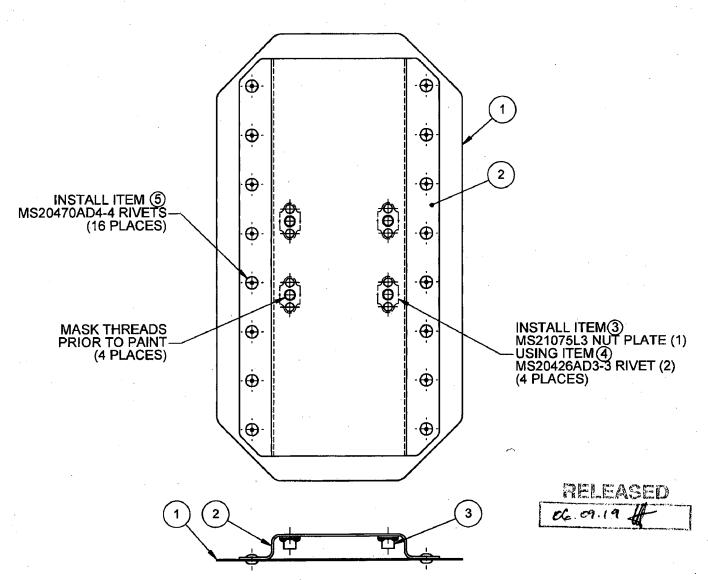
**SHOP COPY** RETURN TO ENGINEERING UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE WORK ORDER

NOTES

- 1) BOND D3305-1 FOAM TO D3303-043 BRACKET ASSEMBLY USING 3M 1300 ADHESIVE (0.002" TO 0.010" THICK) IN ACORDDANCE WITH MANUFACTURER'S INSTRUCTIONS
- 2) COVER HEAD REST WITH D3306-041 COVER ASSEMBLY AS SHOWN
- 3) PART IS SYMMETRICAL AT CENTERLINE
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED 6) IDENTIFY AS FOLLOWS USING FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD, P/N D3303-041 B/N BXXXXX, FOR PRODUCT **ELIGIBILITY SEE PDA04-11"**







# D3303-043 BRACKET ASSEMBLY

ITEM	QTY -043	P/N	DESCRIPTION
	Х	D3303-043	BRACKET ASSEMBLY
1	1	D3303-1	PLATE
2	1	D3303-3	HEAD REST
3	. 4	MS21075L3	NUT PLATE
4	8	MS20426AD3-3	RIVET
5	16	MS20470AD4-4	RIVET

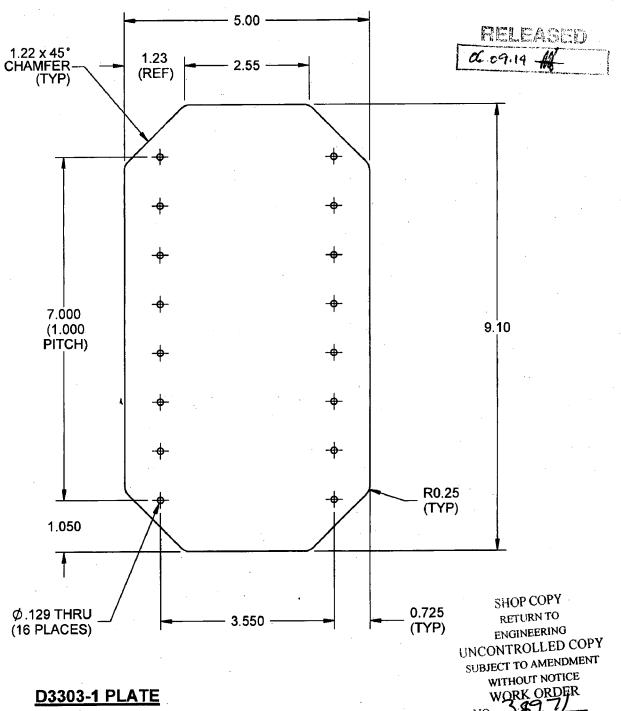
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMEN
WITHOUT NOTICE
WORK ORDER
NO. 3621

## NOTES:

- 1) FINISH: POWDER COAT ASSEMBLY GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED



DRAWN BY DESIGN DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA APPROVED DRAWING NO. CHECKED REV. B PH D3303 SHEET 3 OF 4 TITLE DATE **SCALE HEAD REST** 06.08.17



1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.032 THICK SHEET (REF. DART SPEC. M2024T3S.032)

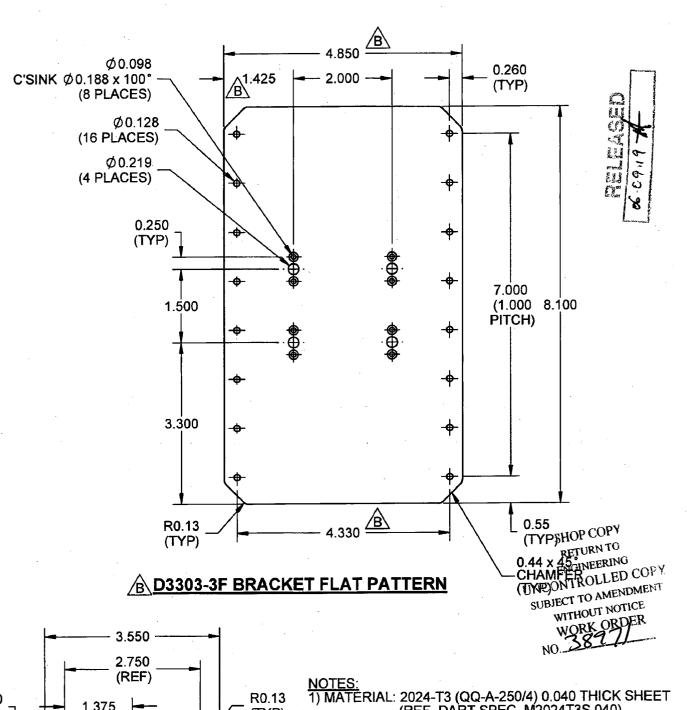
2) FINISH: CHÈMICAL CONVERSION COAT AS PER DART QSI 005.4.1

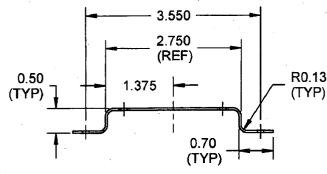
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

5) BREAK ALL SHARP EDGES 0.005 TO 0.015



DESIGN	DRAWNBY	DART AEROS	
CHECKED PH	APPROVED	DRAWING NO. D3303	REV. B SHEET 4 OF 4
DATE 06.08.17		TITLE HEAD REST	SCALE 1:2





**D3303-3 BRACKET BEND DETAIL** 

(REF. DART SPEC. M2024T3S.040)

- 2) FINISH: CHÈMICAL CONVERSION COAT AS PER **DART QSI 005.4.1**
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

## **Peter Hum**

From: David

David Shepherd [dshepherd@dartaero.com]

Sent:

May 7, 2008 3:55 PM

To:

'Peter Hum'

Subject: RE: D3303-1 hole for MS20470AD4 rivet

### Peter,

From our discussion, it sounds like its only 4 out of 16 holes that are oversized and that they are randomly scattered about the part.

If this is the case, then these parts are acceptable.

If it had been every hole, then I would have been concerned about the parts becoming loose because of aircraft vibration.

### David

From: Peter Hum [mailto:phum@dartaero.com]

Sent: Wednesday, May 07, 2008 7:48 AM

To: 'David Shepherd'

Subject: D3303-1 hole for MS20470AD4 rivet

### David.

Production is making a D3303-1 plate on the waterjet. Some of the 0.128" holes for the MS20470AD4 rivet have been elongated to 0.138" in diameter (see attached). This part is for the D3303-041 Head Rest. The 0.138" hole is outside the tolerance of 0.128" holes.

Is this deviation acceptable?

FYI – Eric Downing has indicated to me that waterjet is in need of maintenance (parts on order) and that is why we are getting some of the holes for flat patterns elongated. This sort of deviation is a temporary problem.

# Peter

No virus found in this incoming message.

Checked by AVG.

Version: 7.5.524 / Virus Database: 269.23.9/1417 - Release Date: 5/6/2008 8:07 AM

No virus found in this outgoing message.

Checked by AVG.

Version: 7.5.524 / Virus Database: 269.23.9/1419 - Release Date: 5/7/2008 7:46 AM